



Class Insecta, Insects

Order Coleoptera, Beetles

Coleoptera means “sheathed wings.” All beetles have hard forewings, called elytra, which do not help in flying but cover the membranous hind wings and protect the abdomen. Beetles are the largest group of insects, making up approximately 40% of all known insect species. Their habit, diet, and range are quite variable. About 40 families contain predaceous species. All beetles have chewing mouthparts.

Lady beetles

Family Coccinellidae

Description and life history: This large group of important predators is mostly predaceous as both larvae and adults. Aphid-feeding larvae are usually slender, 3–15 mm long, and black or dark gray with occasional bright colored markings. They resemble lacewing larvae, but lack their long mandibles. Mealybug and scale insect-feeding larvae may be covered in a waxy white coating. Adults are small, oval, and 8–10 mm. In addition to the familiar brightly colored spotted lady beetles, this family includes the tiny black spider mite destroyer and the black mealybug destroyer with an orange head and tail.

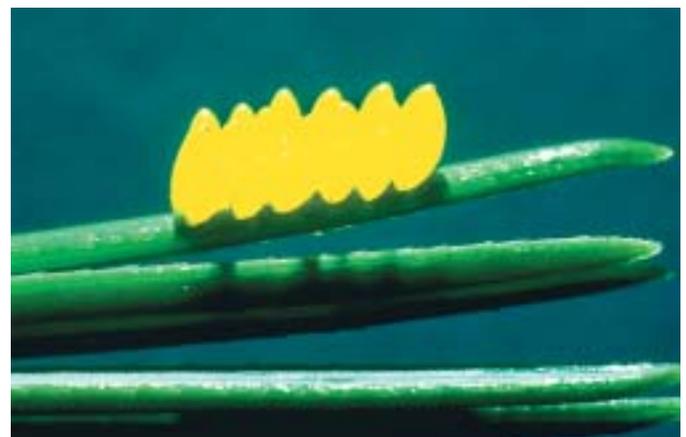
Prey species: Lady beetles feed on a range of insects, including aphids, scales, mealybugs, whiteflies, and occasionally spider mites and insect eggs. The convergent lady beetle, *Hippodamia convergens*, which prefers aphids, is one of the most common species in the North Central United States. It is available commercially and has been widely distributed. An introduced species, the multicolored Asian ladybeetle, *Harmonia axyridis*, feeds on aphids and scale insects on trees and commonly invades homes by the thousands in the fall.



Hippodamia convergens, convergent lady beetle adults. (308)
Photo: John Davidson



Hippodamia convergens, convergent lady beetle larva. (311)
Photo: Clemson University Cooperative Extension Service



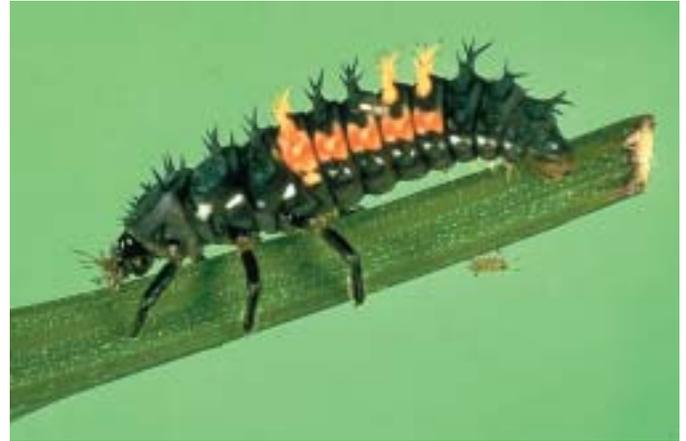
Lady beetle egg clutch on pine needle. (309)
Photo: John Davidson



Lady beetles or ladybird beetles (continued)



Cryptolaemus montrouzieri, mealybug destroyer adults feeding on a mealybug egg mass. (313)
Photo: David Laughlin



Harmonia axyridis, multicolored Asian lady beetle larva. (312)
Photo: John Davidson



Harmonia axyridis, multicolored Asian lady beetle adult with eggs (left) and aphids (right). (310) Photo: John Davidson



Coleomegilla maculata, pink lady beetle (or 12-spotted lady beetle) adult feeding on pollen. (317)
Photo: Jeff Hahn



Harmonia axyridis, multicolored Asia lady beetle pupa. (315)
Photo: John Davidson



Stethorus punctum picipes, adult spider mite destroyer that specializes in controlling spider mite populations. (314)
Photo: Oregon State University Cooperative Extension Service



Lady beetles or ladybird beetles (continued)



From left to right: a spider mite, and three life stages of *Stethorus*, larva, pupa, adult. (319)
Photo: John Davidson



Adalia bipunctata, twospotted lady beetle adult and pupa with shed pupal skins. (318)
Photo: Whitney Cranshaw



Chilocorus stigma, twicestabbed lady beetle larva. Larvae have spines, and adults are black with two small red spots. This genus commonly attacks armored scale insects. (316)
Photo: Cliff Sadof



Chilocorus species pupate in their last larval skins, which are spiny. (320)
Photo: John Davidson